

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No.: 09/851,164
Attorney Docket No.: Q63442

REMARKS

This Amendment, submitted in response to the Office Action dated February 23, 2004, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-44 are all the claims pending in the application. Applicant has added new claims 45-49 to more clearly define the claimed subject matter. The present invention relates to a method and apparatus for correcting the color of a standard print medium and a proofer such as a color printer or the like. In conventional proofing techniques, the characteristics of the proofing print medium would not accurately reflect the print characteristics of the desired output medium. The present invention obviates these deficiencies with a color converter connected to an output terminal of the color separator that has one-dimensional conversion lookup tables (LUTs) for effecting gradation conversion on each of the colors.

Rejections under 35 U.S.C. § 102(b)

~~Claims 1-2, 7-8, 13, 15-18, 21, 24 and 26-28 stand rejected under 35 U.S.C. 102(b) as~~
being allegedly anticipated by Liang (US Patent 5,579,031).

To anticipate the Applicant's claims under 35 U.S.C. § 102, the reference must disclose every element of the Applicant's claims. However, Liang fails to disclose at least the limitations of independent claims 1 and 7 of a color correcting means comprising one-dimensional lookup tables for converting first colorimetric data to second colorimetric data. Liang teaches a model that produces an output set of values $(L', a, b)_n$ from R,G,B and another model produces another set $(L', a', b')_n$ from R,G,B data of a different monitor. These two sets are compared in a

comparator (see col. 11, ln. 42-44, Liang). This does not teach the converter of the claimed invention because the models that the Examiner is referring to only produces sets of R,G,B values to colorimetric values but does not convert between first and second colorimetric data using an LUT. In particular, the Lab data converted from RGB data are not converted relative to each other. The Liang reference thus lacks conversion between first and second colorimetric spaces using an LUT, where the first colorimetric space is obtained as a conversion of device dependent data.

Also, Liang teaches an adaptor that comprises a receiving and determining element which receives each set of R, G, B values and checks them against a plurality of sets of R, G, B values comprising a single transform look up table (LUT) which correlates R, G, B values to a new set of R', G', B' values (*see* col. 5, ln. 28-32, Liang). The values of the LUT in Liang correspond to R, G, B values. By contrast, the one-dimensional conversion look up tables of the present invention as claimed effect conversion using several look up tables. The multiple look up tables of the present invention effect conversion of colors different from those effected by the single look up table of Liang.

The Liang reference fails to teach or suggest all of the claim limitations as set forth in independent claims 1 and 7. Therefore, independent claims 1 and 7 should be allowed. Additionally, since claims 3-6 and 29-36 depend from claims 1 and 7 and since the Liang reference does not disclose all of the limitations of claims 1 and 7, we submit that claims 3-6 and 29-36 are patentable at least by virtue of their dependency from claims 1 and 7.

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Because independent claims 2, 8, 13, 18, 21, and 24 include similar recitations for correcting for a difference between a standard print medium and a desired print medium, these claims are also patentable for the reasons set forth above for claims 1 and 7. The remaining claims are patentable at least based on their dependency.

With further regard to independent claims 18, 21, and 24, the Examiner's reliance on cols. 10-11 of Liang is incorrect. The Examiner essentially contends that the two LUT's are related to each other by a ratio of one to the other. This is incorrect since the difference of one Lab space to the other is determined and not a quotient or corrective multiplication product.

Rejections under 35 U.S.C. § 103(a)

Claims 3-6, 9-12, 14, 19-20, 22-23, 25, 29-31, 33-35, 37-39 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liang (US Patent 5,579,031) in view of Keating (US Patent 5,619,434). Claims 32, 36, 40, and 44 are rejected under 35 U.S.C. §103 as being unpatenable over Liang in view of Keating and Dundas (US Patent 5,604,567).

~~Claims 3-6, 9-12, 14, 19-20, 22-23, 25, 29-31, 33-35, 37-39, and 41-43 stand rejected~~
under 35 U.S.C. § 103(a) as being unpatentable over Liang in view of Keating.

The Examiner concedes that Liang does not disclose that said colorimetric values are varied about the color of the standard print medium. He cites Keating to make up for this above deficiency. However, Keating and Liang do not contain any suggestion (express or implied) that they be combined, or that they be combined in the manner suggested. First of all, Keating is a method and apparatus particularly suited for the simulation of colored fabric or textiles, such as denim (see abstract, ln. 17-20, Keating). By contrast, Liang relates to a process and related

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apparatus for matching the color displayed on a plurality of color display devices (see col. 1, ln. 20-22, Liang). This can not correlate to generating simulation of colored material as in Keating.

Also, both Keating and Liang are complete and functional in themselves, so there would be no reason to use parts from or add or substitute parts to any reference. The primary use of Liang is in the field of computer assisted color publishing systems (see col. 1, ln. 24-27, Liang). While the primary use of Keating is to provide predictive visible indication of ranges of shades for colored material (see col. 1, ln. 10-13, Keating). To combine Keating and Liang would be cumbersome and excessive especially since they are directed towards different components. Keating focuses on actual material while Liang is displaying color on devices.

Liang and Keating cannot reasonably be said to render obvious the claimed subject matter. Therefore, Applicant respectfully requests that the Examiner withdraw the § 103(a) rejection from claims 3-6, 9-12, 14, 19-20, 22-23, 25, 29-31, 33-35, 37-39, and 41-43. Dundas does not make up for the above deficiency.

Applicant has included new proposed claims 45-49 to describe the invention more particularly with regard to the pending recitations of the claims. Applicant respectfully requests that the Examiner take note of these new claims.

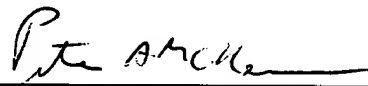
Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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